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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,190	05/15/2001	Raymond Clarke	13282-1	9310

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EXAMINER

WEINSTEIN, STEVEN L

ART UNIT	PAPER NUMBER
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1761

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/858,190

Applicant(s)

CLARKE, RAYMOND

Examiner

Steven L. Weinstein

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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In view of new grounds of rejection, the Final Rejection of 3/30/04 is hereby withdrawn, and the following non-final rejection is made.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 11-15 are rejected under 35 U.S.C. 112, first paragraph as based on a disclosure which is not enabling. Claim 11 is an article claim. Claim 11 recites that the packaging atmosphere contains 14-19% of O₂, less than 10% of CO₂ (which reads on zero), and a total quantity of the two being less than 17%. Claim 11 does not clarify when the atmosphere of the package has 14-19% of O₂. That is, is this amount of O₂ present throughout, or at anytime in the life of the package (which is at one end of the possibilities), or is this amount of O₂ present for only a short time after initially closing the package (say on the order of only hours), before the bananas begin to absorb the oxygen? As disclosed, a review of applicants specification, including Table 2, would appear to indicate that for at least twelve days after packaging, the package still has an atmosphere that contains 15.5% O₂. This is based on the assumption that "day 23" in the table refers to 23 days after harvesting. Since the specification discloses packaging occurs eleven days after harvesting, then the "day 23" equals twelve days. However, if the "day 23" represents 23 days after packaging, then the amount of time the packaging atmosphere is within the recited time is even longer. Clarification and/or correction is requested. The reason this is important is that not only is the recited concentration not accompanied by any time recitation, so that it would be unclear as to what references

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would meet just the concentration range, but applicant has urged patentability on the fact that the package is kept at this high O₂ range, but the references teach a lower range. However, as noted above, the references which rely on the produce to lower the O₂ content would appear to inherently pass through the recited range, even if it is only for a short time. Another issue is the phrase "have not reached their climacteric". The phrase is not specifically defined in the specification. Is the intent of this phrase to mean the ripening process has not started at all or does this phrase refer to what is called the climacteric peak? Clarification is requested. Finally it is noted that in claim 11, the container is recited as having a certain O₂ permeability, R ratio and ethylene permeability. Claims 12 and 13 then recite that the container has a permeable control member that comprises a gas permeable membrane with a certain O₂ permeability. How do the permeabilities recited in claim 11 relate to those of claim 13? That is, does the package recited in claim 11 without the permeable control member have the recited permeability properties even when the package has the permeable control member? Stated somewhat differently, do the two permeabilities represent different properties based on different structural elements? The specification appears to be unclear in this regard.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Scolaro ('378) in view of Cummin et al ('333) , or vice versa, both further in view of Badran ('542), Badran et al ('544), Anderson ('875), Antoon ('331), and De Moor ('293). Anderson et al can also be relied on as the primary reference for the reasons given previously.

In regard to claim 11, Scolaro discloses a package comprising a sealed container containing bananas which have not ripened, and thus inherently have not reached "their climacteric" and a packaging atmosphere around the bananas, and wherein the CO₂ to O₂ ratio is at least 3, the ethylene permeability is at least three times the O₂ permeability and the atmosphere can be in the amount recited. It is not clear how the O₂ permeability of Scolaro relates to that of the claim since the units are entirely different. In any case, Cummin et al, Badran, Badran et al, Anderson, Antoon and De Moor all disclose that it was of course notoriously conventional to manipulate permeabilities in accordance with the product, its weight, its respiration rates, and the amount of product and packaging size to provide a reduced O₂ and raised CO₂ levels to slow respiration of produce. To modify Scolaro, if necessary, and manipulate the permeability to achieve extended storage life without ripening, which is the objective of both Scolaro and Cummin et al, would therefore have been prima facie obvious. Similarly, Cummin et al also teaches packaging green bananas in a sealed container with ratios of permeabilities that appear to be in the recited range. It would appear that at least in a short time after packaging, Cummin et al would have had a gas concentration within the recited range. In any case, it would have been obvious to

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modify Cummin et al and employ an O₂ concentration within the recited range for its art recognized and applicant's intended function of slowing down respiration. It is again noted that the claims do not recite at what point, or for how long the O₂ concentration is at the recited range. In regard to the dependent claims, which recite a permeable control member, Anderson and Antoon and DeMoor all teach the conventionality of control members employed with produce packaging with DeMoor specifically teach the particular control member, and to therefore modify Scolaro or Cummin et al and provide a produce package with a permeable control member for its art recognized and applicants intended function is seen to have been obvious. In summary, the art taken as a whole fairly teaches one of ordinary skill in the art to derive through routine determinations, the permeability necessary to extend the life of produce, including bananas, as a function of the known variables that are a function of the required permeability needed to retain a certain modified atmosphere within a package to extend storage life. There is nothing magic or secretive in these manipulations. The art fully and clearly teach that by lowering O₂ levels and raising CO₂ levels, and maintaining the modified levels, in a produce package, which in a transportable package can be done by employing semi permeable packaging material, the produce will have extended life. The art clearly teaches that each type of produce and even the amount of the same produce and the size of the container, will necessitate different but routinely determinable permeabilities.

All of applicants remarks filed 1/20/05 have been fully and carefully considered but are not seen to be convincing, essentially for the reasons given above. The urging

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relative to the high concentration of O₂ is directed, to a degree, to limitations not found in the claims, since no measure of time is recited, and most, if not all of the art would appear to be in the recited ranges, at least for a short time. Applicant has argued each reference separately as if they were applied alone in a vacuum. The rejection is based on what the art taken as a whole teaches, and what the art taken as a whole teaches is that the storage life of any produce is a direct function of the atmosphere created in the containment receptacle, which atmosphere is achieved through the use of semi-permeable materials whose permeability is provided and are directly related to well known variables. The remarks also urge that Scolaro is not enabled. The reasoning behind this is not understood and appear to be based on assumptions that are opinions in themselves.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven L. Weinstein whose telephone number is 571-272-1410. The examiner can normally be reached on Monday-Friday from 7:00AM to 2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano, can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steve Weinstein
STEVE WEINSTEIN
PRIMARY EXAMINER 1761
3/17/06